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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,056	01/08/2002	Jon Shaffer	108176/full	4998

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BRYAN CAVE LLP
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EXAMINER

BARRY, CHESTER T

ART UNIT	PAPER NUMBER
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1724

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DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,056

Applicant(s)

SHAFFER

Examiner

Chester T. Barry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 is/are allowed.
- 6) ☒ Claim(s) 16 is/are rejected.
- 7) ☒ Claim(s) 17-29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 08 January 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10. 6) ☐ Other: _____

The specification is objected to under 35 USC §112, first paragraph, for failure to provide an adequate and clear description of "simethylcone." Regarding page 6 line 1 of the response filed 1/28/03, while "simetbylcone" is on its face an obvious typographical error, applicants' attentions to correct the same introduced another problem: Simethylcone is not a known compound.¹ It is unclear how to make this unknown compound. A search of US Patents for patents describing "simethylcone" did not identify any patents teaching how to make this compound. Correction is required.

Claim 16 is rejected under the doctrine of obviousness type double patenting² over at least claim 15 of USP 6402941 to Lucido. As shown in the attached table, the subject matter of patent claim 15 falls within the scope of at least claim 1 of the pending application. Accordingly, absent a terminal disclaimer compelling common ownership of the patent flowing from this application and that of Lucido '941, a would-be infringer of the subject matter of patent claim 15 could be subject to suit from more than one patent owner. The fact that patent claim 15 is further limited by **additional** claim elements *not* recited in the pending claim, e.g., a **controller** comprising a **means for maintaining a constant fluid level** in the bioreactor, and a **second independent pumping means** for delivering a portion of the fluid from the bioreactor to the environment to be treated

¹ See attached citation to page 533 (guideword "siphon") of Grant & Hackh's Chemical Dictionary; Results of US Patent database text search of "simethylcone" (the one "hit" was another of assignee's patents); Internet search on www.yahoo.com producing no answer for "simethylcone."

² The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*,

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while inorganic and organic nutrients are pumped to said bioreactor, the second pumping means being in fluid communication with the bioreactor and an environment to be treated, has no impact on the foregoing obviousness type double patenting analysis. See, for example, *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Should an appropriate terminal disclaimer be filed in a response filed under 37 CFR 1.116, it would be entered after final rejection and would result in withdrawal of this basis of rejection.

Claims 17 – 29 are objected to as being dependent on a rejected base claim but would be allowable if presented in independent form.

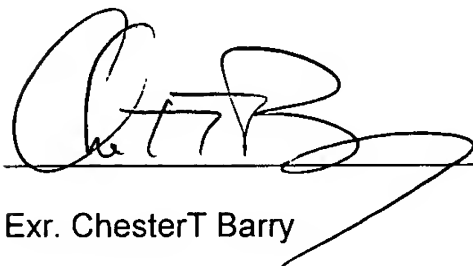
Pending application Claim 1 (some claim elements rearranged for ease of comparison with patent)	Claim 15 of USP 6402941
<p data-bbox="236 458 811 556">16. An apparatus for delivering microorganisms to an environment to be treated, comprising:</p> <p data-bbox="236 596 811 661">a bioreactor comprising an output tube to the environment to be treated;</p> <p data-bbox="236 733 811 799">a nutrient container comprising a mixture of inorganic and organic nutrients;</p> <p data-bbox="236 904 811 1142">[and] a solenoid in fluid communication with the water supply and the bioreactor, the solenoid having an open and closed position wherein water flows into the bioreactor when the solenoid is in the open position and water is prevented from entering into the bioreactor when the solenoid is in the closed position</p> <p data-bbox="236 1316 811 1513">a nutrient pumping means for pumping inorganic and organic nutrients from the nutrient container to the bioreactor, the nutrient pumping means is in fluid communication with the nutrient container and the bioreactor;</p>	<p data-bbox="868 458 1443 556">15. An apparatus for delivering activated microorganisms to an environment to be treated, comprising:</p> <p data-bbox="868 596 1443 694">a first container having a bioreactor chamber comprising organic nutrients, inorganic nutrients and microorganisms;</p> <p data-bbox="868 733 1443 799">a second container comprising a mixture of inorganic and organic nutrients;</p> <p data-bbox="868 838 1443 871">a controller comprising:</p> <p data-bbox="945 904 1443 1142">(1) a solenoid that is connected to an incoming water supply, the solenoid having an open position that permits water flow into the bioreactor and a closed position which presents water from flowing into the bioreactor from the outside water supply, and</p> <p data-bbox="945 1214 1443 1279">(2) a means for maintaining a constant fluid level in the bioreactor;</p> <p data-bbox="868 1316 1443 1491">a first independent pumping means for pumping inorganic and organic nutrients to the bioreactor from the second container, the first pumping means being in contact with the second container and the bioreactor; and</p> <p data-bbox="868 1524 1443 1786">a second independent pumping means for delivering a portion of the fluid from the bioreactor to the environment to be treated while inorganic and organic nutrients are pumped to said bioreactor, the second pumping means being in fluid communication with the bioreactor and an environment to be treated.</p>

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Applicants' response³ necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Respectfully,



Exr. Chester T Barry

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703-306-5921

³ Incidentally, a "mete" is a boundary, as in the expression "metes and bounds" often recited in patent law. See, for example, Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 41 USPQ2d 1865 (Sup. Ct. 1997). In contrast, "meets" are typically competitive athletic events.